Extended Carriage Installation Guide

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Extended Carriage Installation

This document provides instructions for installing the extended carriage to the motorcycle dynamometer (dyno). To ensure safety and accuracy in the procedures, perform the procedures as they are described.

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CONVENTIONS USED IN THIS MANUAL

The conventions used in this manual are designed to protect both the user and the equipment.

example of convention	description
	The Warning icon indicates potential harm to the person performing a procedure and/or the dynamometer equipment.

TECHNICAL SUPPORT

For assistance, please contact Dynojet Technical Support at 1-800-992-3525, or write to Dynojet at 2191 Mendenhall Drive, North Las Vegas, NV 89031.

Visit us on the World Wide Web at www.dynojet.com where Dynojet provides state of the art technical support, on-line shopping, 3D visualizations, and press releases about our latest product line.

PARTS LIST

The following table lists all of the parts included in the Extended Carriage Installation kit. Check your kit against the parts listed to make sure you have received all of the parts. If any part is missing, contact Dynojet Technical Support.

part number	description	quantity
36488100	Nut, 3/8"-16, Nylock	6
36560834	Screw, 1/4-20 x 1/2", Button-head	2
DM150-002-003	Bolt, 5/16 x 1 1/2"	4
DM150-002-004	Washer, 5/16", Lock	4
DM150-002-008	Nut, 5/16"	4
DM150-011-002	Washer, 3/8", Flat	12
DM150-015-001	Nut Block	1
DM150-016-007	Carriage Screw Support Bracket	1
DM150-019-012	Bolt, 3/8 x 1", Hex	6
EXT100-206	Extended Carriage Support Bracket	1
—	Carriage	1
—	Small Leveling Shim	1
—	Large Leveling Shim	1

INSTALLATION

The extended carriage option increases the maximum wheel base (measured from the front of the front wheel to the center of the rear wheel) from 84 inches to 102 inches for testing raked cruisers and drag bikes.

WARNING

To prevent possible injury, disconnect the battery before performing any dyno maintenance or installing any optional accessory.

Removing the Tire Carriage

1 Using a 5/32-inch allen wrench, remove the two button-head screws securing the carriage screw support bracket and remove the bracket.

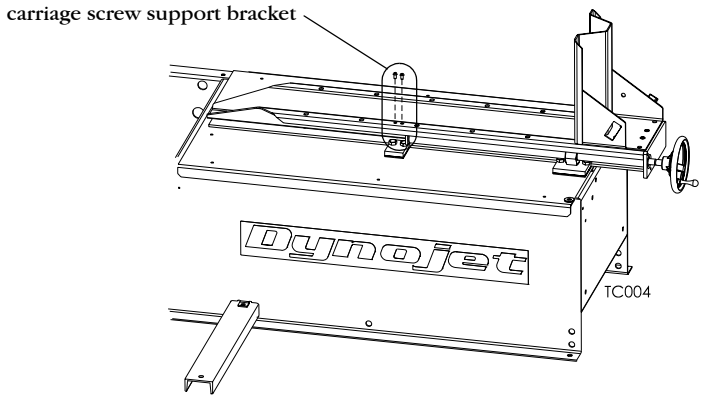

Figure 1: Remove the Carriage Screw Support Bracket

2 Unscrew the carriage until it is free from the nut block. Slide the carriage off the dyno.

3 Using a 1/2-inch wrench, remove the bolts (discard bolts) and washers securing the nut block and front clamp to the dyno cover and set aside.

4 Using a 1/2-inch wrench, remove the bolts and washers securing the two rear clamps to the dyno cover and set aside.

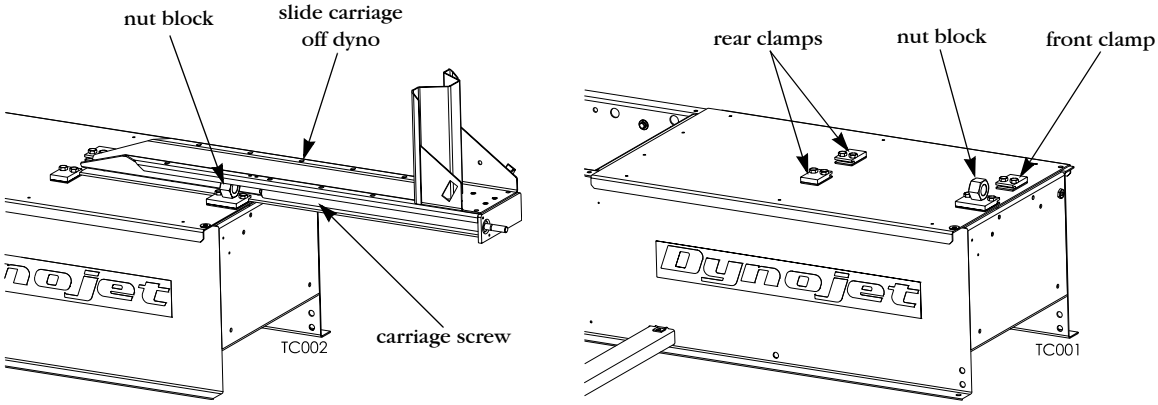

Figure 2: Remove the Tire Carriage, Nut Block, and Clamps

INSTALLING THE EXTENDED CARRIAGE SUPPORT BRACKET

1 Remove the eight screws securing the top cover to the dyno and set aside. Remove the cover and set aside.

Removing the cover will make installing the extended carriage support bracket easier.

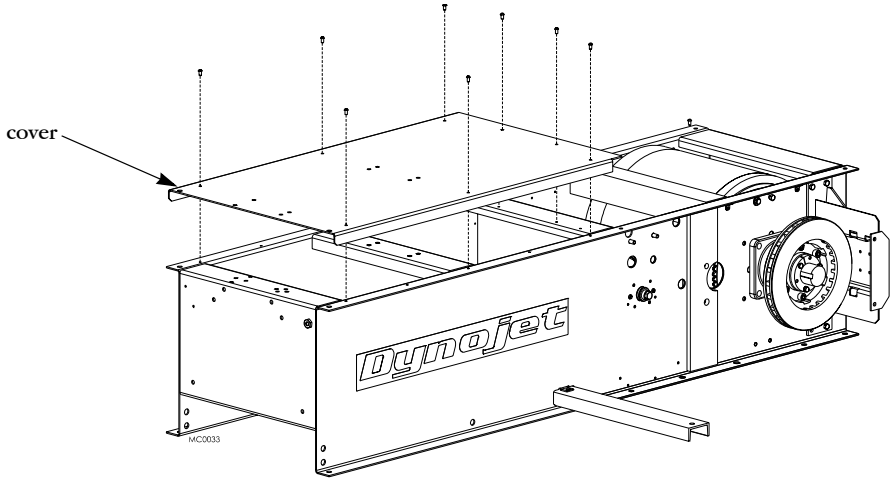

Figure 3: Remove the Top Cover

2 Loosely attach the extended carriage support bracket to the front of the dyno using six 3/8 x 1-inch bolts, twelve 3/8-inch flat washers, and six 3/8-inch nylock nuts. Be sure the bolts are installed from the inside of the dyno.

Figure 4 shows a cut away view of the extended carriage support bracket, cut away view of the dyno frame, and three of the six mounting bolts.

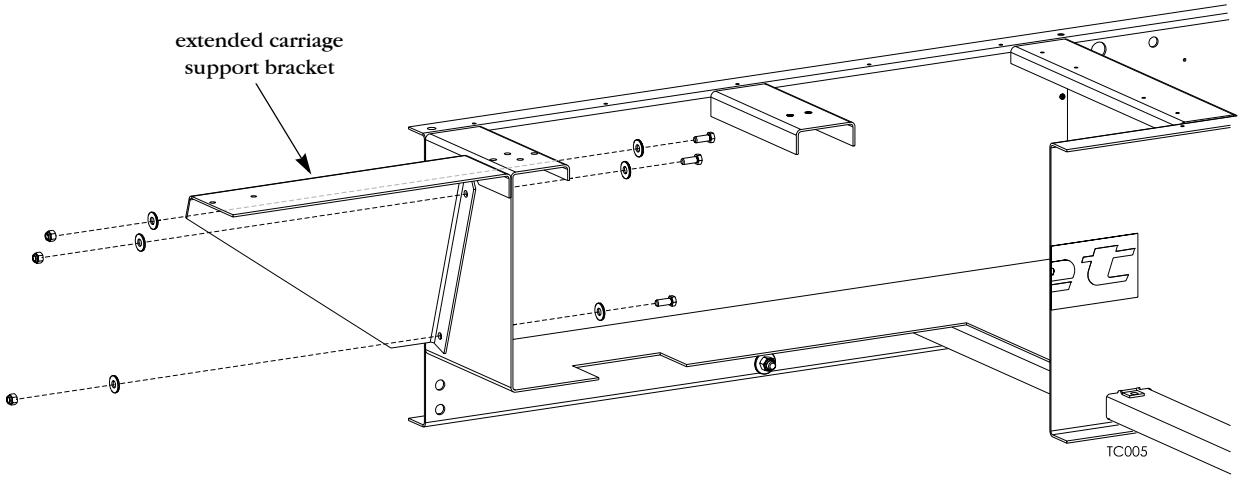

Figure 4: Install the Extended Carriage Support Bracket

3 Using a straight edge, align the top of the support bracket with the top of the dyno chassis.

4 Tighten all six mounting bolts to 30 ft. lb.

5 Install the top cover on the dyno using the eight screws removed earlier. Refer to Figure 3.

6 Install the two rear clamps to the dyno cover using the bolts and washers removed earlier. Refer to Figure 2.

7 Using the original shim and the large shim included with the kit, loosely attach the nut block to the front of the extended carriage support bracket using two 5/16 x 1 1/2-inch bolts, the flat washers you removed earlier, two 5/16-inch lock washers, and two 5/16-inch nuts.

8 Using the original shim and the small shim included with the kit, loosely attach the front clamp to the front of the extended carriage support bracket using two 5/16 x 1 1/2-inch bolts, the flat washers you removed earlier, two 5/16-inch lock washers, and two 5/16-inch nuts.

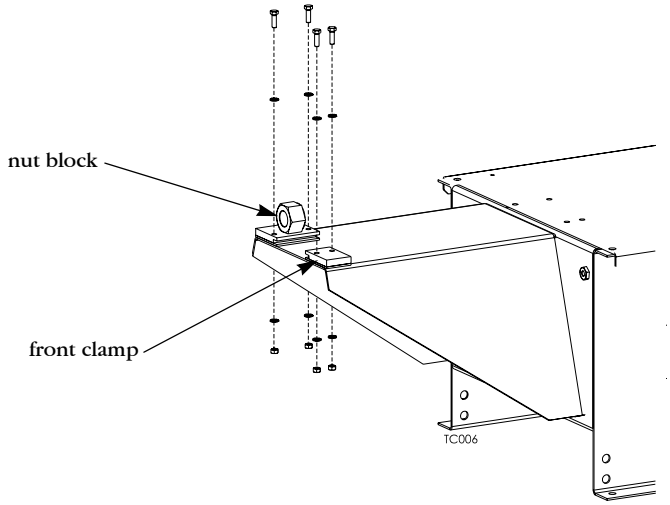

Figure 5: Install the Nut Block and Front Clamp

INSTALLING THE EXTENDED CARRIAGE

1 Slide the extended carriage through the nut block and clamps until the carriage screw contacts the nut block. Be sure the slide plate is under the rear carriage clamps.

2 Screw the carriage through the nut block.

3 Install the screw support bracket.

3a Place the belleville washers over the end of the carriage screw. It is important the belleville washers are installed in the configuration shown in Figure 6.

3b Place the screw support bracket in front of the carriage screw. The two threaded holes in the bracket should face the two matching holes in the carriage. Loosely install the two 1/4 x 1/2-inch button-head screws.

3c Before tightening the screws, apply some pressure to the bracket to compress the belleville washers. The handle should still turn freely, but the turning force should now be around five to six pounds.

To adjust the force needed to turn the crank handle, adjust the compression of the belleville washers.

3d Using a 5/32-inch allen wrench, tighten the two button-head screws.

4 Tighten the bolts in the nut block and the three carriage clamps.

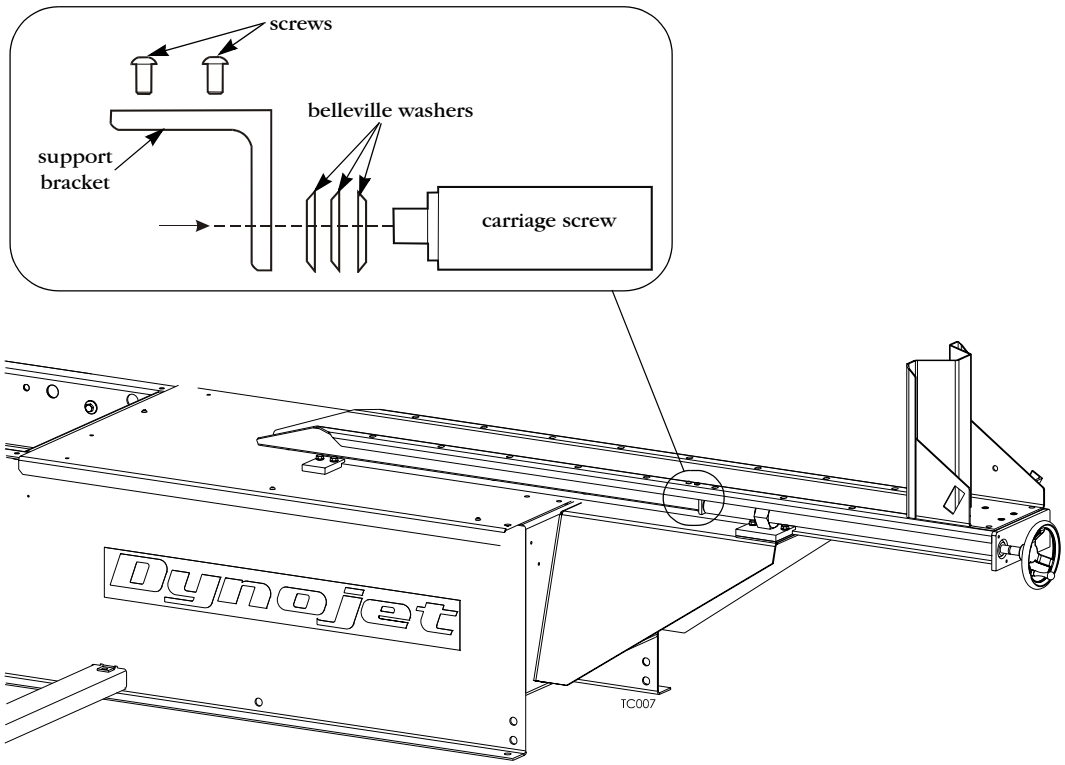

Figure 6: Install the Extended Carriage and Support Bracket